



MIKE ENDSLEY

STATE REPRESENTATIVE • 26TH ASSEMBLY DISTRICT

Representative Mike Endsley

Testimony before the Assembly Committee on Natural Resources

2011 Assembly Bill 363

January 4th, 2012

Chairman and members, I appreciate the opportunity to speak to you today. I am proud to author a bill intended to help address the increasing problem of the theft of plastic crates, pallets and shells for scrap resale. We are introducing this bill on behalf of local beverage distributors in our respective districts, and to protect consumers that ultimately pay higher prices as a result of these thefts.

Assembly Bill 363 would amend Wisconsin Statute 134.05 by adding plastic bulk merchandise containers to the existing scrap metal statute. Plastic bulk merchandise containers are defined as *a plastic crate, shell or pallet used by a product producer, distributor, or retailer for the bulk transportation or storage of retail containers of bottled beverage products.*

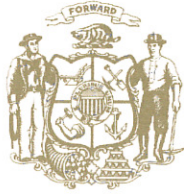
By including plastic bulk merchandise in Wisconsin Statute 134.05 scrap plastic dealers who purchase plastic bulk merchandise containers would be required to maintain records necessary to establish "a seller's right" to sell such a container. As a result of requiring scrap recyclers to keep and obtain pertinent information, Wisconsin bottlers and plastic companies will be able to participate in the Institute of Scrap Recycling Industries (ISRI) ScrapTheftAlert.com. This website is a new online theft reporting system available to law enforcement and recyclers free of charge, designed to address the growing problem of plastic crates and shells being stolen and sold to scrap recyclers.

Every year Wisconsin bottlers are experiencing a large loss from those who steal beverage crates and shells and then sell large quantities of these shells and crates to plastic recycling regrind operators. The Wisconsin Beverage Association estimates that the industry loss exceeds \$1million annually as a result of this theft.

While plastic companies are taking steps, internally, to prevent the theft of plastic soda crates and shells this will aid in helping this industry address a serious and costly issue. By requiring scrap recyclers to keep and obtain pertinent information, Wisconsin bottlers will be better situated to address this growing problem. Similar laws have been established in Texas and Arizona, with legislation pending in a number of other states.

This bill is a common sense way to prevent the sale of plastic crates, pallets, and shells. Assembly Bill 363 enables plastic companies and bottling companies to better address this theft that have negatively affected these industries. When companies have to spend money to replace stolen pallets this can mean higher costs being passed onto consumers and less money available for hiring new workers. I would encourage you to support this legislation so that plastic companies are better situated to address this costly issue that negatively affects their business; and can have a negative impact on consumers.

I would be happy to answer questions at this time.



Van H. Wanggaard

Wisconsin State Senator

Senator Wanggaard Testimony in Favor of Assembly Bill 363

Thank you, Chairman Mursau and members, for today's hearing on Assembly Bill 363, which brings Wisconsin's scrap plastic laws in line with existing scrap laws for metal. I am pleased to appear today with Rep. Endsley in support of this legislation.

It may seem surprising, but the theft of bulk plastic is becoming an increasing problem for Wisconsin's beverage industry. I was first alerted to this problem while touring a Dr. Pepper Snapple distributor in my district in Mount Pleasant.

While at first blush this may seem like a complex proposal, in fact it merely amends existing scrap metal statutes to include bulk plastic. Further, it narrowly defines bulk plastic to include only plastic pallets, crates, or shells used by the beverage industry to transport bottled beverages. *This bill will in no way affect the regular consumer who recycles his/her plastic bottles and milk containers.* Instead, by simply requiring scrap dealers to keep a record of information at the point of sale, this bill will discourage would-be thieves of bulk plastic.

This proposal has the support of both the Wisconsin Beverage Industry and the Institute of Scrap Recycling Industries. Other affected parties have registered their support as well. I urge the Assembly Committee on Natural Resources to act quickly on this proposal, so that our bottlers can worry less about theft and more about creating and retaining jobs in Wisconsin.

Serving Racine County - Senate District 21



Lisa Harmon
President

George Liegel
Vice President

**Public Hearing, Assembly Committee on Natural Resources
Testimony in Support of Assembly Bill 363
January 4th, 2012**

Good morning Chairperson Mursau and distinguished members of the Assembly Committee on Natural Resources. My name is Les Blankenship. I am a Distribution Center Manager for Coca-Cola Refreshments and live in Menomonee Falls. I am also a member of the Wisconsin Beverage Association Executive Board. The beverage association - which is comprised of Pepsi, Coke and Dr. Pepper-Seven Up bottlers - employs some 3200 working men and women in manufacturing and distribution facilities throughout the state of Wisconsin. I appreciate the opportunity to appear before you today on behalf of the association to ask for your support of Assembly Bill 363. This bill is an important part of an overall strategy to stem the theft of plastic pallets and plastic soda shells for scrap resale.

Bottlers are experiencing a large loss every year from scavengers who take beverage shells from the back of stores and sell them to plastic recycling regrind operators. This is a universal beverage industry problem, one that is costing Wisconsin bottlers more than \$1 million annually. This bill will help aid in the recovery of stolen material and we believe will also serve as a deterrent.

In addition to this legislative remedy, the industry is taking steps internally and in coordination with scrap recyclers to address this costly problem.

Within our bottling operations, systems are being internalized to treat the trays/pallets as inventory. Drivers are responsible for them, just as they are responsible for product. Trays/pallets are checked out every day and they are checked back in at the end of the day. It takes increased coordination within a company's business units, but budget dollars that continually went toward purchases of new trays/pallets are now put back into operations.

The beverage industry in Wisconsin and nationally is also working with scrap dealers through the Institute of Scrap Recycling Industries, Inc. (ISRI), the trade group of recyclers, salvage yards, and scrap yards. ISRI has been active in attempts to reduce the purchase of stolen materials. In fact, they have a dedicated website – ScrapTheftAlert.com – that brings their members together with businesses and the police to report and watch out for stolen materials. ISRI has also put our bulk containers on a "Do Not Buy" list for their members. In seeking a legislative solution in Wisconsin with the Wisconsin chapter of ISRI, it was determined that the bill should simply amend the existing reporting and recordkeeping for scrap metal under Chapter 134 by adding "bulk plastic merchandise containers" as a covered material.

In closing, I would like to thank Representative Mike Endsley, Senator Van Wanggaard and others who signed on as cosponsors of this bill. As Wisconsin bottlers, we appreciate your interest in working with us to address this costly problem. Thank you and I would be happy to answer any questions.

Records of Scrap Metal Purchases
2007 Wisconsin Act 64
[2007 Senate Bill 473]

2007 Wisconsin Act 64, which took effect on March 26, 2008, requires a scrap dealer to maintain specified records of purchases of scrap metal and other metal items.

Summary of 2007 Wisconsin Act 64

A. Categories of Scrap Metal. The Act distinguishes the following categories of metal items:

1. **"Scrap metal"** is any of the following:
 - A metal article.
 - Metal removed from or obtained by cutting, demolishing, or disassembling a building, structure, or manufactured item.
 - Other metal that is no longer used for its original purpose and that can be processed for reuse.
2. **"Ferrous scrap"** is scrap consisting primarily of iron or steel that is not nonferrous scrap, a metal article, or a proprietary article.
3. **"Nonferrous scrap"** is scrap metal consisting primarily of metal other than iron or steel, except that "nonferrous scrap" does not include aluminum beverage cans, used household items, and certain other materials.
4. A **"metal article"** is a manufactured item that consists of metal, is usable for its originally intended purpose without processing, repair, or alteration, and is offered for sale as scrap (rather than for reuse). The term does not include antique or collectible items, such as jewelry, coins, silverware, or watches.
5. **"Proprietary article"** is a heterogeneous category consisting of the following:
 - Metal articles that are marked to identify the article as if the property of a governmental entity or any of several specified kinds of businesses.
 - Specified materials used in the construction of certain facilities, such as electric utility transmission facilities (i.e., copper/aluminum conductors, cable and wire) and railroad track.
 - Specified items, including metal beer kegs, manhole covers, and metal grave markers.

B. Recordkeeping Requirements

1. Ferrous Scrap. The Act states that: “[a] scrap metal dealer may purchase scrap metal other than nonferrous scrap, a metal article, or a proprietary article from any person over the age of 18.” (This wording appears to imply that a scrap metal dealer may not purchase ferrous scrap from a person under the age of 18.) It does not impose any recordkeeping requirements on the purchase of ferrous scrap.

2. Nonferrous Scrap, Metal Articles, and Proprietary Articles – Commercial Accounts. A “commercial account” is a business with which a scrap metal dealer has an ongoing and documented business relationship. A scrap metal dealer must create and maintain records with regard to its purchases of nonferrous scrap, metal articles, and proprietary articles from a commercial account that identify the commercial account and its employees who deliver the scrap metals, and record the time, date, value, and general nature of each purchase from the commercial account.

3. Nonferrous Scrap, Metal Articles, and Proprietary Articles – Non-Commercial Accounts. The Act imposes substantially greater requirements with regard to the purchase of nonferrous scrap, metal articles, and proprietary articles from a non-commercial account than from a commercial account. It requires information of the same general nature, but in greater detail. It also requires verification of the information, for example through the inspection and recording of information from government-issued identification, and verification that the seller is the lawful owner of the materials or is authorized to sell the materials. (Again, the language of this provision appears to imply that a scrap metal dealer may not purchase these materials from a person under the age of 18.)

C. Other Provisions

1. Records Retention. The Act requires a scrap metal dealer to retain most records regarding scrap metal purchases for **not less than two years** after recording it and certain information regarding commercial accounts for not less than two years after the dealer’s most recent transaction with the account.

2. Law Enforcement Requests for Records. The Act requires that a scrap metal dealer make its records regarding the purchase of scrap metal available to a law enforcement officer, upon request. It authorizes a law enforcement officer to request all scrap metal dealers to report all purchases of nonferrous scrap, metal articles, and proprietary articles. The Act provides that a law enforcement officer or agency may disclose this information only to another law enforcement officer or agency.

3. Penalties. A scrap metal dealer who knowingly violates the requirements created by the Act is subject to a fine of up to \$1,000, 90 days in prison, or both on the first offense and a fine of up to \$10,000, imprisonment for up to nine months, or both on the second offense. The third such offense is a Class I felony, which is punishable by a fine of up to \$10,000, imprisonment for up to three years and six months, or both. Each day that a scrap metal dealer knowingly violates the requirements created by the Act is a separate offense.

3. Ordinances. The Act authorizes a county, city, village, or town to enact an ordinance to regulate the purchase of scrap metal by scrap metal dealers. Except for 1st class cities (i.e., Milwaukee), such an ordinance may not be more stringent than the requirements of the Act. The Act also authorizes a county, city, village, or town to enact an ordinance to require scrap metal dealers to submit records regarding scrap metal purchases to a law enforcement officer in an electronic format.

4. Private Cause of Action. The Act provides that a person who owns nonferrous scrap, a metal article, or a proprietary article and who incurs injury or loss due to a violation of the reporting requirements of the Act or of the general theft statute may bring a civil action against the person who committed the violation to recover damages. In addition, if the court finds that the violation was committed for the purpose of commercial advantage, it may award punitive damages to the victim.

5. Penalty Classification for Theft. The penalty classification for theft varies by the value of the property stolen. The Act provides that, for determination of the penalty for theft, the value of scrap metal includes any costs that would be incurred in repairing or replacing any property damaged in the theft or removal of the scrap metal.

Questions & Answers

1. **Can scrap dealers purchase aluminum cans from individuals under 18 years old?** Yes. This legislation imposes requirements on the purchase of "nonferrous scrap, metal articles, and proprietary articles." Aluminum cans are specifically exempted from the definition of "nonferrous scrap." Wis. Stat. s. 134.405 (1) (e) 1. Accordingly, this legislation does not apply to aluminum can purchases. (Note, however, that the language of Act provision does appear to imply that a scrap metal dealer may not purchase "nonferrous scrap, metal articles, and proprietary articles" from a person under the age of 18. Wis. Stat. § 134.405 (3).)
2. **Does this legislation change the City of Milwaukee ordinance?** No. This Act permits a county, city, village, or town to enact an ordinance to regulate the purchase of scrap metal by scrap metal dealers and prohibits those ordinances from being more stringent than the requirements of this Act *except* for 1st class cities (i.e., Milwaukee), which are permitted to enact ordinances that are more stringent than this Act. Accordingly, the City of Milwaukee ordinance may be more stringent than this statute, but other local ordinances may not be more stringent than this statute. Wis. Stat. § 134.405 (6). Scrap dealers must comply with both their local ordinances and the state requirements. With the exception of the City of Milwaukee, those standards should be consistent. (As stated above, the City of Milwaukee may impose additional requirements.)
3. **What records must be kept for non-commercial account retail transactions?** If the seller of nonferrous scrap, metal articles or proprietary articles is an individual, the scrap dealer must record all of the following at the time of the sale:
 - a. The seller's motor vehicle operator's license or other government-issued, current photographic identification that includes the seller's full name, current address, date of birth, and recognized identification number. (If the seller is non an individual, record the delivery person's identification described above.)
 - b. The time and date of the purchase;
 - c. The number and state of issuance of the license plate on the seller's or deliverer's vehicle; and
 - d. A description of the items received, including the weight of the scrap or articles and a description of the scrap or articles that is consistent with guidelines promulgated by a national recycling industry trade organization.

With respect to a purchase of nonferrous scrap or a metal article the scrap metal dealer obtains the seller's signed declaration that the seller is the owner of the items being sold. Wis. Stat. § 134.405 (3) (a).

4. **What additional records must be kept for proprietary article transactions?** With respect to proprietary article transactions, the scrap dealer must either:
 - a. Obtain documentation from the seller, such as a bill of sale, receipt, letter of authorization, or similar evidence, that establishes that the seller lawfully possesses the proprietary article; or
 - b. The scrap metal dealer must document that the scrap metal dealer has made a diligent inquiry into whether the person selling the proprietary article has a legal right to do so, and, not later than one business day after purchasing the proprietary article, must submit a report to a local law enforcement department describing the proprietary article and submits a copy of the seller's or deliverer's identifying information. Wis. Stat. § 134.405 (a) 5.
5. **What must occur in order for a commercial account to be created?** A "commercial account" is a commercial enterprise with which a scrap metal dealer "maintains an ongoing and documented business relationship." Ongoing business relationship is vague and undefined, but a business relationship can range from a few transactions every year to daily transactions. There is personal judgment and evaluation of common business practices involved in this determination.
6. **What recordkeeping requirements are imposed on commercial account transactions that are subject to this law?** A scrap metal dealer must create and maintain records with regard to its purchases of nonferrous scrap, metal articles, and proprietary articles from a commercial account that include:
 - a. The full name of the commercial account.
 - b. The business address and telephone number of the commercial account.
 - c. The name of a contact person at the commercial account who is responsible for the sale of nonferrous scrap, metal articles or proprietary articles to the scrap metal dealer.
 - d. The time, date and value of each of the scrap metal dealer's purchases from the commercial account.
 - e. A description of the predominant types of nonferrous scrap, metal articles or proprietary articles the scrap metal dealer has purchased from the commercial account. Wis. Stat. § 134.405 (3) (b).

7. **Is a copy of a driver's license required for a commercial account transaction?** No.
8. **Can payments on commercial accounts be made in cash to the drivers?** There is no explicit prohibition against paying the driver in cash, but this is not a recommended practice if you are claiming that the transaction was a commercial transaction with a commercial account. The best practice would be to pay the commercial entity – not the individual delivery person. If the transaction is with the individual delivery person and he is not the commercial account holder, one could argue that this transaction is an individual retail transaction subject to the more stringent recordkeeping requirements under this statute.
9. **Who is liable for not following the recordkeeping requirements, proprietary article inquiries, etc?** The scrap dealer is responsible for ensuring that these requirements are followed. The scrap dealer is generally responsible for the actions of his/her employees.
10. **Who is liable if all recordkeeping and other required procedures are followed and stolen material is inadvertently purchased?** There is no liability under this circumstance. The penalties under this statute apply to "knowing" violations by scrap dealers. Wis. Stat. § 134.405 (5).

The U.S. Scrap Recycling Industry Protects the Environment and Creates Good Jobs in Wisconsin



The U.S. scrap recycling industry is not only a thriving economic engine, but also a pivotal player in environmental protection, resource conservation and sustainability. The industry recycled more than **130 million metric tons of materials in 2010**, thereby transforming outdated or obsolete products and materials into useful raw materials needed to produce new products.¹

Scrap recycling offers **real sustainable solutions** for balancing economic growth and environmental stewardship. Scrap recycling boosts economies from small towns in rural America to major cities and beyond through international trade. The result is economic and environmental sustainability for our nation and our world.

Scrap Recyclers are The Original Recyclers®:

- The scrap recycling industry is a very sophisticated and capital intensive industry that has been creating “green jobs” in the United States for decades. As the first link in the manufacturing supply chain, scrap recycling has been integral to America’s economy, job creation and resource sustainability for more than 200 years.
- Recycling reduces greenhouse gas emissions by significantly **saving the amount of energy needed to manufacture the products** that we buy, build and use every day. The energy saved by recycling can then be used for other purposes, such as heating our homes and powering our automobiles.



Not Only Does the Scrap Recycling Industry Protect the Environment, It Provides Countless Employment Opportunities in Wisconsin.

(\$ Million)	Direct	Supplier	Induced	Total
Jobs	2,640	2,390	3,210	8,240
Wages	\$151.03	\$121.54	\$130.37	\$402.95
Economic Impact	\$519.00	\$452.50	\$435.72	\$1,407.22

- In 2011, 2,640 jobs are supported by the operations of the scrap recycling industry in Wisconsin.² An additional 5,600 jobs are indirectly supported by the scrap recycling industry through suppliers and the induced impact of the industry’s expenditures. These jobs include equipment manufacturers, engineers and truck drivers among other occupations. Together these 8,240 employees will earn a total of \$403.0 million in 2011.
- In fact, the total economic impact of the scrap recycling industries in Wisconsin is \$1.4 billion. Scrap recycling accounts for 0.6% of the state's Gross State Product.³
- All of this activity generates nearly \$65.7 million in state and local revenues and another \$86.0 million for the federal government.

¹ Data from a U.S. Geological Survey and the U.S. International Trade Commission.

² Based on the Economic Impact of the Scrap Recycling Industry in the United States (2011), produced for the Institute of Scrap Recycling Industries, Inc. by John Dunham and Associates, 2011.

³ GDP based on first quarter of 2011, second revision value of \$15.101 trillion, see: *Gross Domestic Product, First Quarter 2011 (second estimate); Corporate Profits, First Quarter 2011 (preliminary estimate)*, Bureau of Economic Analysis, May 26, 2011, and *ECONOMIC RECOVERY WIDESPREAD ACROSS STATES IN 2010 Advance 2010 and Revised 2007–2009 GDP-by-State Statistics*, Bureau of Economic Analysis, June 7, 2011.

The U.S. Scrap Recycling Industry Creates Jobs in Wisconsin (WI)

	Jobs	Wages	Economic Impact
Direct Impacts			
Scrap Recyclers	2,600	\$149,680,000	\$504,850,000
Brokers	30	\$1,360,000	\$14,150,000
Total Direct Impacts	2,640	\$151,030,000	\$519,000,000
Supplier Impacts			
Agriculture	321	\$6,805,119	\$53,520,239
Mining	4	\$354,151	\$1,203,983
Construction	44	\$2,551,993	\$5,024,104
Manufacturing	507	\$34,114,008	\$180,967,872
Transportation & Communication	183	\$14,044,291	\$51,120,466
Wholesaling	106	\$8,276,475	\$21,949,663
Retailing	17	\$512,565	\$1,286,815
Finance, Insurance & Real Estate	271	\$15,421,249	\$52,554,177
Travel & Entertainment	176	\$3,423,918	\$10,044,432
Business & Personal Services	694	\$31,355,652	\$63,220,096
Government	65	\$4,680,862	\$11,607,464
Total Supplier Impacts	2,390	\$121,540,000	\$452,500,000
Induced Impacts			
Agriculture	98	\$2,209,916	\$12,175,574
Mining	3	\$251,290	\$786,684
Construction	31	\$1,629,668	\$3,458,324
Manufacturing	191	\$12,404,445	\$85,038,559
Transportation & Communication	125	\$8,856,987	\$36,113,135
Wholesaling	104	\$7,137,723	\$18,836,321
Retailing	577	\$15,228,801	\$37,394,548
Finance, Insurance & Real Estate	401	\$21,599,624	\$111,463,475
Travel & Entertainment	455	\$8,074,850	\$25,390,658
Business & Personal Services	1,174	\$49,509,598	\$96,026,575
Government	47	\$3,369,595	\$8,514,414
Other	3	\$101,369	\$526,076
Total Induced Impacts	3,210	\$130,370,000	\$435,720,000
Total Economic Impact	8,240	\$402,950,000	\$1,407,220,000

Some details may not add due to rounding

The U.S. Scrap Recycling Industry Promotes Wisconsin Exports

The U.S. scrap recycling industry provides the high value, environmentally friendly and energy saving raw materials that make America's manufacturing industries more competitive in the global marketplace. The scrap industry also supplies the world's rapidly growing demand for commodities ranging from ferrous metals including steel and iron; nonferrous metals such as aluminum, copper and zinc; plastics; paper; electronics; tires and rubber; glass; and textiles. In 2010, commodity grade scrap products were exported to more than 155 countries worldwide, **generating nearly \$30 billion in export sales and significantly helping the U.S. balance of trade.**

Scrap commodities are among the nation's largest exports by value, and overall, exports account for 30% of the industry's economic activity. These exports create 2,454 good jobs in Wisconsin and help strengthen the economy.¹

The Economic Impact of Scrap Recycling Exports in Wisconsin

	Direct	Supplier	Induced	Total
Jobs	765	701	989	2,454
Wages	\$48,348,145	\$35,698,675	\$40,200,343	\$124,247,163
Economic Impact	\$152,439,596	\$132,907,587	\$134,354,135	\$419,701,319

The Scrap Recycling Industry is a Major Exporter in Wisconsin

- Approximately 30% of the scrap materials processed in Wisconsin are exported to other countries for manufacture into new products. These exports help create jobs in Wisconsin and also help reduce worldwide energy demand and the need to mine and harvest virgin materials. In 2011, 765 jobs are supported by the export activities associated with the processing and brokerage operations of scrap recyclers operating in Wisconsin.² These are good jobs paying an average wage of \$57,208.³



- An additional 1,690 jobs are provided by supplier operations and through the indirect effects of scrap recycling exports. These jobs pay a total of \$75.9 million in wages.
- All of this activity generates \$419.7 million in economic benefits in Wisconsin and contributes \$19.7 million in tax revenues for Wisconsin and its local governments.
- Recent independent research shows there is more than enough domestic scrap to meet American manufacturers' demand for recycled materials for the foreseeable future, reinforcing the role the scrap recycling industry plays as a positive solution in the country's manufacturing landscape, while also playing a critical role in efforts to strengthen the U.S. economy through the growth of exports.⁴

¹ Based on the Economic Impact of the Scrap Recycling Industry in the United States (2011), produced for the Institute of Scrap Recycling Industries, Inc. by John Dunham and Associates, 2011.

² This includes firms involved in the purchasing, processing and brokering of scrap materials including ferrous and nonferrous metals, paper, electronics, rubber, plastics, glass and textiles.

³ Direct impacts are those associated with scrap processors and brokers. Supplier impacts are associated with firms providing goods and services to scrap recyclers and brokers, including peddlers, and induced impacts are those resulting from the re-spending of wages by workers in the direct and supplier sectors.

⁴ Research provided by U.S. International Trade Commission.

Recycling goes far, far beyond the bin at the edge of the curb. In fact, in 2010 alone, more than 130 million metric tons of scrap metal, paper, plastic, glass, textiles, rubber and electronics, valued at more than \$77 billion, were manufactured into specification grade commodities by the scrap recycling industry in the United States. These commodities were sold as valuable feedstock material to industrial consumers in the United States and in more than 155 countries around the world and contributed nearly \$30 billion in export sales, significantly helping the U.S. trade balance.

The U.S.-based scrap recycling industry is a sophisticated, capital-intensive industry that employs approximately 130,000 workers in the United States. As the first link in the manufacturing supply chain, scrap recycling has been integral to the U.S. economy, global trade and resource sustainability for more than 200 years.



U.S. Economy

	2009	2010
Industry Size	\$54 Billion	\$77 Billion
Employment (Yearly Average)	105,000	107,500
Volume of Scrap Material Annually Processed (Metric Tons)		
Iron and Steel	70,000,000	74,000,000
Paper	45,400,000	46,800,000
Aluminum	4,700,000	4,600,000
Copper	1,700,000	1,900,000
Lead	1,300,000	1,200,000
Zinc	150,000	160,000
Plastic (bottles)	658,390 (2008)	654,220 (2009)
Electronics	1,800,000	3,500,000
Tires (# of tires)	80,000,000	90,000,000



Environment

Scrap recycling reduces greenhouse gas emissions by requiring significantly less energy to manufacture products from recyclables than virgin materials and by avoiding landfilling.

Energy saved using recycled materials is up to:

92% for aluminum	90% for copper	87% for plastic
68% for paper	56% for steel	34% for glass

Scrap recycling conserves natural resources:

Recycling one ton of:

- > Paper saves 3.3 cubic yards of landfill.
- > Steel conserves 2500 lbs. of iron ore, 1400 lbs. of coal and 120 lbs. of limestone.
- > Aluminum conserves more than 5 metric tons of bauxite ore and 14 megawatt hours of electricity.

Cleaner air and water result from safely removing potentially hazardous materials and keeping them out of landfills:

- > Mercury switches removed from older automobiles
- > Lead recovered from computer monitors



Global Trade

	2009	2010
Value of Scrap Commodities Exported Helping U.S. Trade Balances	\$21.9 Billion	\$29.6 Billion
Metric Tons of Scrap Exported Including:	47 Million	45 Million
Iron and Steel	21.3 Million	19.6 Million
Paper	19.1 Million	18.9 Million
Aluminum	1.7 Million	1.9 Million
Nickel, Stainless and Alloy	2.4 Million	1.9 Million
Copper	843,000	1.0 Million
Plastic (bottles)	580,000	518,000
Lead	140,000	44,000
Zinc	47,000	78,000
Rubber	111,000	172,000
Number of Countries Scrap was Exported to and Leading Destinations/Value	155 Countries	158 Countries
China	\$7.1 Billion	\$8.5 Billion
Canada	\$2.7 Billion	\$3.0 Billion
South Korea	\$1.4 Billion	\$1.7 Billion
Turkey	\$0.9 Billion	\$1.5 Billion
Taiwan	\$0.9 Billion	\$1.4 Billion
United Kingdom	\$0.7 Billion	\$1.1 Billion
Mexico	\$0.6 Billion	\$1.0 Billion
India	\$0.6 Billion	\$0.8 Billion
Germany	\$0.4 Billion	\$0.7 Billion
Italy	\$0.3 Billion	\$0.7 Billion
Hong Kong	\$0.6 Billion	\$0.7 Billion
Japan	\$0.3 Billion	\$0.6 Billion



**Institute of
Scrap Recycling
Industries, Inc.**

Voice of the Recycling Industry

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Visit us at www.isri.org, find us on [f](#) and [in](#) at Institute of
Scrap Recycling Industries, Inc., and follow us on [t](#) @isri

ISRI: The Voice of the Recycling Industry

As the "Voice of the Recycling Industry," the Institute of Scrap Recycling Industries, Inc. (ISRI), serves our membership through education and advocacy concerning the issues that define the scrap recycling industry: economic expansion, job creation, environmental protection, energy savings and safety.

A Washington, D.C. based trade association, ISRI represents approximately 1,600 private, for-profit companies operating at more than 7,000 facilities in the United States and 30 countries worldwide. **Our members are processors, brokers and industrial consumers of scrap commodities, including ferrous and nonferrous metals, paper, electronics, rubber, plastics, glass and textiles. ISRI's associate members include both equipment and service providers for the scrap recycling industry.**

ISRI is the voice of a multi-billion dollar industry dedicated to strengthening the economy, protecting the environment and providing a safe workplace for the estimated 130,000 men and women it employs. Our members range from Mom and Pop small businesses to multinational corporations. No matter the size, they all make significant contributions to their local, state, federal and global economies.

Despite the lingering effects of the global recession, the scrap recycling industry is strong and growing stronger. Our analysis of 2010 data shows a thriving industry whose monetary value has grown 40 percent since 2009. As one of the oldest green industries and the first link in the manufacturing supply chain, scrap recycling has been a key contributor to the U.S. economy, global trade and resource sustainability for more than 200 years.

ISRI assists its member companies with a wide variety of products and services designed to help them run better, cleaner, safer and more profitable operations. First and foremost, ISRI believes that all members' operations should be carried out "Safely or Not at All." To that end, the association provides a vast array of services for members ranging from OSHA compliance guidance to the design of a customized safety blueprint that is fashioned at the member's facility by one of the ISRI Safety professionals. ISRI leads the industry in the production and distribution of training materials designed to improve the safety and operations of the scrap industry.

ISRI also provides extensive compliance guidance to assist members comply with federal and international laws and regulations pertaining to the environment, shipping and transportation, licensing and other key areas affecting their businesses.

Implementation of RIOS™ — the Recycling Industry Operating Standard™ — is also a major focus of ISRI's. RIOS™ is the only recycling industry-specific integrated quality, environmental, health, and safety management system and seeks to provide consumers with the same assurances of compliance that they have come to expect from programs like ISO 9001, ISO 14001 and the OSH 18000 standards. R2/RIOS™ is the premium standard for electronics recyclers.

ISRI also publishes the Scrap Specifications Circular, which for more than 85 years has provided specifications for hundreds of grades of scrap designed to ensure consistency and standardization for the worldwide sale and purchase of scrap commodities.

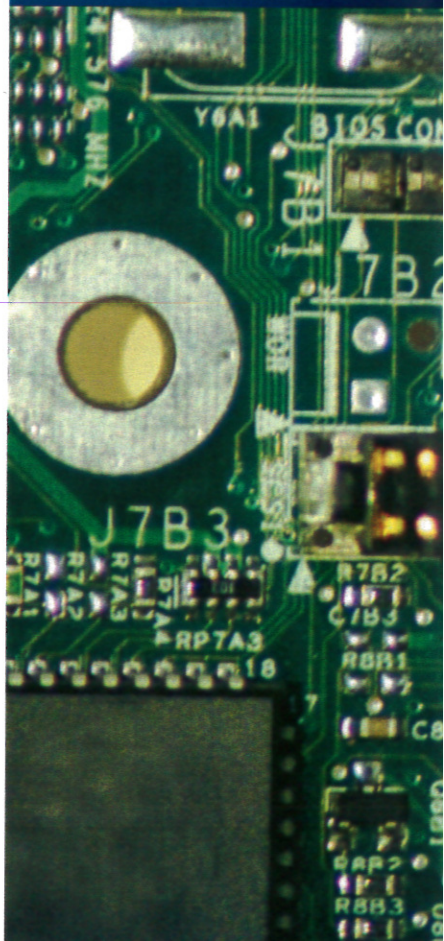
ISRI provides continuing education and training for its members through forums, seminars, workshops, commodity roundtables, publications, an annual convention, and the world's largest annual scrap recycling exposition. Last year, more than 5,000 industry professionals from more than 40 countries attended ISRI's convention.

Among its many services, ISRI promotes public awareness of the value and importance of recycling to the production of the world's goods and services, along with the positive environmental benefits derived from scrap recycling. As part of this effort, ISRI advocates on behalf of the industry before the U.S. Congress, federal and state agencies, state governments and international bodies to help ensure the free and fair trade of scrap commodities globally. ISRI also educates the public about how the scrap recycling industry is uniquely positioned to meet the challenges of today's world — a leading economic engine for the world providing real solutions that help protect and sustain the earth's environment.



Institute of
Scrap Recycling
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Voice of the Recycling Industry



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The Scrap Recycling Industry: **The Original Recyclers®**

From the earliest uses of scrap thousands of years ago, to the optical scanners, x-rays and air jets separating materials (*see bottom image*) in today's high-tech shredders, scrap recycling has evolved as the major industry **dedicated to transforming materials to create new products and driving economies by making the old, new again**. Today, the U.S. scrap recycling industry employs more than 130,000 men and women.

As **the original recyclers**, for decades — and indeed, centuries — the scrap recycling industry has been purchasing, processing and brokering old materials to be remade into new products, **providing critical resources for America's manufacturing industries**. Now, with a continuing societal focus on protecting our natural resources and reducing greenhouse gas emissions, the scrap recycling industry is being recognized as one of the **world's first green industries**, while playing a prominent role as an economic leader, job creator, major exporter and environmental steward.

Imagine a world without recycling

The world would be a dramatically different place, with more pollution and greenhouse gases, increased energy use and dramatically faster depletion of our virgin natural resources. The scrap recycling industry **annually transforms more than 130 million metric tons of obsolete materials** from consumers, businesses and manufacturers into useful raw materials. Without scrap recycling, more mining and use of virgin natural resources would be required. The world would be headed in a dangerous direction. **Scrap recycling protects the earth's air, water and land**, allowing society to have less impact on the planet and directly contributing to our quality of life.

THE SCRAP RECYCLING INDUSTRY

More than 60% of the iron and steel made in the United States is manufactured using ferrous scrap.

Recycling one ton of steel conserves 2,500 lbs. of iron ore, 1,400 lbs. of coal and 120 lbs. of limestone.

Nearly 60% of U.S. aluminum consumption comes from domestically recycled aluminum.

Recycling one ton of aluminum conserves up to five tons of bauxite ore and 14 megawatt hours of electricity.

Ninety million tires were processed in 2010 for reuse in a variety of industries.

More than 36% of the raw material used to make new paper products comes from recycled paper.

Recycling one ton of paper saves 3.3 cubic yards of landfill.

Energy saved using recycled materials versus virgin materials up to:

- 92% for aluminum
- 90% for copper
- 87% for plastic
- 56% for iron and steel
- 65% for paper

Sources: EPA, International Aluminum Institute, Recycling Research Institute, SRI, USGS.



In the 21st century, the scrap recycling industry is **uniquely positioned to meet the challenges of today's world**—a leading economic engine for America providing real solutions that help protect and sustain the earth's environment.



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The Scrap Recycling Industry: **Economic Leaders and Job Creators**

The U.S.-based scrap recycling industry is a sophisticated, capital-intensive industry that has been creating “green jobs” in the United States for decades. As the first link in the manufacturing supply chain, scrap recycling has been integral to the U.S. economy, job creation, resource sustainability, energy savings and global trade for more than 200 years. After having contracted sharply in 2009 as a result of the global recession, the scrap recycling industry rebounded by more than 40 percent in 2010 to more than **\$77 billion in sales**. Despite the lingering effects of the global recession on certain sectors of the U.S. economy, the scrap recycling industry has been at the forefront of job creation, **adding 10,000 jobs to the economy** since the beginning of 2010. The industry is a positive solution in the U.S. manufacturing landscape and employs approximately 130,000 men and women based on environmentally sensitive and sustainable business practices.

Major Exporter – Helping the Balance of Trade

The U.S. scrap recycling industry provides the high value, environmentally friendly and energy-saving raw materials that make America’s manufacturing industries more competitive in the global marketplace. The scrap industry also supplies the world’s rapidly growing demand for all manner of commodities ranging from iron and steel, to paper, nonferrous metals, plastics, electronics, rubber and more. In 2010, commodity grade scrap products were exported to more than 155 countries worldwide, generating nearly **\$30 billion in export sales** and significantly helping the U.S. balance of trade.

IMAGINE A WORLD WITHOUT RECYCLING

\$77 billion industry that is helping lead the way in the 21st century global economy.

Recent independent research shows there is enough domestic material to meet U.S. manufacturers’ demand for recycled materials for the foreseeable future.

130 million metric tons of scrap materials processed annually, including:

- 74 million metric tons of iron and steel
- 47 million metric tons of paper
- 4.6 million metric tons of aluminum
- 3.5 million tons of electronics
- 1.8 million metric tons of copper
- 1.2 million metric tons of lead
- 1.1 million metric tons of plastic
- 162 thousand metric tons of zinc
- 90 million tires

\$29 billion worth of scrap commodities exported in 2010 to 158 countries.

Leading export destinations include:

- China
- Canada
- South Korea
- Turkey
- Taiwan
- United Kingdom
- Mexico
- India
- Germany
- Italy

These exports, totaling nearly 44 million metric tons, consist of iron and steel, aluminum, nickel and stainless, copper, paper, plastics, lead, zinc, rubber, and electronics.



The scrap recycling industry has added **more than 10,000 jobs to the U.S. economy** since the beginning of 2010 and employs more than 130,000 men and women nationwide.



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Sources: Sources: ISRI, USITC, USGS, U.S. BLS

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The Scrap Recycling Industry: **Environmental Stewards**

The U.S. scrap recycling industry, which employs more than 130,000 men and women, is also a pivotal player in **environmental protection, resource conservation and sustainability**.

The scrap recycling industry recycled more than **130 million metric tons of materials in 2010**, thereby transforming society's outdated and obsolete products and materials into useful raw materials needed to produce new products. In doing so, the scrap recycling industry has made great savings in both energy and natural resources and thus has had an **extremely positive impact on our environment**. Further, by purchasing products at the end of their life and processing them back into raw materials used in the manufacture of new products, scrap recycling reduces the need for virgin materials, such as iron ore, trees and other natural resources.

Scrap recycling offers **real sustainable solutions** for balancing economic growth and environmental stewardship. Scrap recycling stimulates economies from small towns in rural America to major cities to international trade. The result is **economic and environmental sustainability** for our nation and our world.

Recycling Saves Energy

Recycling reduces greenhouse gas emissions by significantly **saving the amount of energy needed to manufacture the products** that we buy, build and use. The energy saved by recycling can then be used for more important purposes, such as heating our homes and powering our automobiles. The scrap recycling industry takes the job of environmental steward extremely seriously.

Recycling	Saves the Energy Equivalent of:	Reduces Greenhouse Gas Emissions by (CO ₂ Equivalent)
One Car	502 Gallons of Gasoline	8,811 lbs.
One Refrigerator	36 Gallons of Gasoline	566 lbs.
One Computer & CRT Monitor	27 Gallons of Gasoline	404 lbs.
One Washing Machine	24 Gallons of Gasoline	397 lbs.
Four Tires	18 Gallons of Gasoline	323 lbs.
One Television	8 Gallons of Gasoline	81 lbs.
10 lbs. of Aluminum Cans	7 Gallons of Gasoline	16 lbs.
10 lbs. of Cardboard	2 Gallons of Gasoline	40 lbs.

The total estimated reduction in CO₂ emissions from scrap recycling globally is approximately 500 million tons per year.

Source: BIR, U.S. EPA Durable Goods Calculator, WARM Calculator
<http://epa.gov/climatechange/wycd/waste/tools.html>



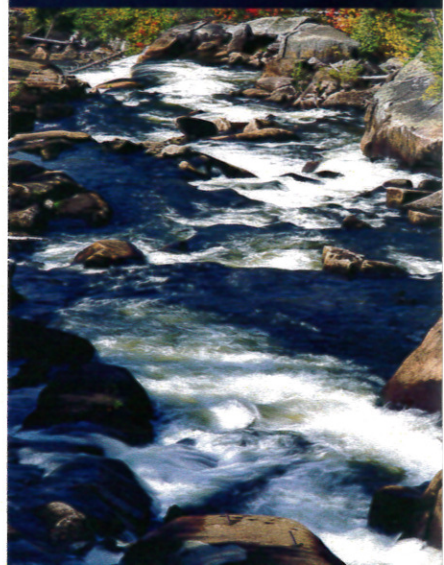
Recycling **reduces energy consumption** and the emission of greenhouse gases that contribute to global climate change, while **helping to maintain a steady supply of raw materials** for the U.S. and global economies.



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The Scrap Recycling Industry: **Safely or Not at All**

The scrap recycling industry is committed to the safety of its more than 130,000 workers and hundreds of thousands of customers. We believe that a zero-accident culture is achievable through the development and implementation of aggressive management models that embrace the certainty that safety and productivity can coexist in the scrap processing environment.

This kind of unwavering commitment to safety as a core value requires a business model that places worker and customer well-being at the very top of every decision tree. If a job cannot be done safely, it simply won't be done at all. Because the scrap recycling industry recognizes that no dollar in revenue — or million dollars in revenue — can possibly justify any injury, the industry has chosen to adopt as its rallying cry, "Safely or Not At All."

The scrap recycling industry recognizes that managing for safety is no different than managing for any other business objective. Once the objective is defined (zero accidents), it is communicated throughout the organization, a plan is put in place to achieve the goal and progress is tracked. When problems are encountered, they are addressed and solved.

Years of data show that profits soar when placed second to safety. A safer workplace is cleaner and better organized, making that workplace more efficient. A healthy workforce is reliable and well-trained. Reduced injuries trigger reduced insurance rates. By factoring safety considerations into new installations, one ends up with better-engineered installations. It goes on and on, creating a "win-win-win" situation for the industry, its workers and its customers.

The scrap recycling industry, through its national trade association, the Institute of Scrap Recycling Industries, Inc. (ISRI), offers its members an aggressive slate of training programs and outreach services that are designed to ease the burden of creating and maintaining a safe work environment for employees.

ISRI's programs and services range from the on-site Scrap Safety Blueprint (assessing a company's areas of strengths and weaknesses) to the OSHA 10-Hour Training program (two-day safety workshop recognized by the Occupational Safety and Health Administration) to ISRI's Safety Transportation Program (minimizing driver accidents and injuries) to the ISRI Safety and Environmental Council (ISEC) in which safety issues are discussed openly and thoroughly among safety professionals. Further supporting these efforts are numerous communications tools that help companies fully adopt and effectively implement safety programs throughout a company's operations.

Through hard work and diligent commitment to safety, the scrap recycling industry is making significant and meaningful progress in providing a safe workplace.



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